

Amendments to the Claims:

Please amend claims 1, 2, 19 and 26, cancel claims 55 and 56 and add new claims 81–103.

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, wherein said composition comprises:

a therapeutically effective amount of an extracellular matrix-binding fragment of Ang-1 protein ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4~~, and/or a vector comprising a nucleic acid molecule that comprises the nucleotide sequence that encodes an extracellular matrix-binding fragment of Ang-1 protein ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4~~.

2. (Currently amended) The pharmaceutical composition of claim 1 comprising a therapeutically effective amount of an extracellular matrix-binding fragment of Ang-1 protein ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3 and SEQ ID NO:4~~.

3-18. (Canceled)

19. (Currently amended) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding; wherein said mutant Ang-1 is selected from the group consisting of:

a peptide having at least 60% homologous to Ang-1;

an Ang-1 mutant missing a linker domain;
an Ang-1 mutant missing an N-terminal coiled-coil region; and
an Ang-1 mutant having a serine at residue 265 in place of cysteine.

20-25. (Canceled)

26. (Currently amended) A pharmaceutical composition comprising
a pharmaceutically acceptable carrier and
a therapeutically effective amount of a mutant Ang-1 having angiogenesis promoting
activity but which is not cleaved into a antagonist fragment; wherein said mutant Ang-1 is a
peptide having at least 60% homologous to Ang-1.

27-52. (Canceled)

53. (Previously presented) A pharmaceutical composition comprising
a) a pharmaceutically acceptable carrier and
b) a therapeutically effective amount of an Ang-1 fragment with antagonist activity.

54. (Previously presented) The pharmaceutical composition of claim 53 further comprising
Ang-2 protein.

55-80. (Canceled)

81. (New) The pharmaceutical composition of claim 54 wherein the Ang-1 fragment is an is
selected from the group consisting of a SEQ ID NO:11 and SEQ ID NO:12.

82. (New) The pharmaceutical composition of claim 53 wherein the Ang-1 fragment is an is
selected from the group consisting of a SEQ ID NO:11 and SEQ ID NO:12.

83. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 70% homologous to Ang-1.

84. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 80% homologous to Ang-1.

85. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 90% homologous to Ang-1.

86. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 95% homologous to Ang-1.

87. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 96% homologous to Ang-1.

88. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 97% homologous to Ang-1.

89. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 98% homologous to Ang-1.

90. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is a peptide having at least 99% homologous to Ang-1.

91. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is an Ang-1 mutant missing a linker domain.

92. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is an Ang-1 mutant missing an N-terminal coiled-coil region.

93. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is an Ang-1 mutant having a serine at residue 265 in place of cysteine.

94. (New) The pharmaceutical composition of claim 19 wherein the mutant Ang-1 having angiogenesis promoting activity but which have reduced or inactive extracellular matrix-binding is an Ang-1 mutant having an amino acid sequence selected from the group consisting of a SEQ ID NO:5. , SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9 and SEQ ID NO:10.

95. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 70% homologous to Ang-1.

96. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 80% homologous to Ang-1.

97. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 90% homologous to Ang-1.

98. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 95% homologous to Ang-1.

99. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 96% homologous to Ang-1.

100. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 97% homologous to Ang-1.

101. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 98% homologous to Ang-1.

102. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is a peptide having at least 99% homologous to Ang-1.

103. (New) The pharmaceutical composition of claim 26 wherein the mutant Ang-1 having angiogenesis promoting activity but which is not cleaved into a antagonist fragment is an Ang-1 mutant having an amino acid sequence selected from the group consisting of a SEQ ID NO:5. , SEQ ID NO:6, SEQ ID NO:9 and SEQ ID NO:10.